CLAIMS

1/ A system for transforming the movements of at least one joint of a user selected from the group constituted by the knee, the elbow, the shoulder, the hip, or the ankle, into control signals for a computer, the system comprising a sleeve (21d, 21g, 41d, 41g) for putting on over the joint and a movement sensor (20d, 20g, 40d, 40g) fixed to the sleeve, the apparatus being characterized in that the sensor (20d, 20g, 40d, 40g) is an on/off sensor and is directly subject to the movements of the walls of the sleeve (21d, 21g, 41d, 41g).

2/ Apparatus according to claim 1, characterized in that the sensor (20d, 20g, 40d, 40g) is designed to be placed and held in the hollow of the joint.

3/ Apparatus according to claim 1 or claim 2, characterized in that the sensor includes a magnetic detector (23d) for placing on one side of the joint and a piece (22d) that is detectable by the detector (23d) and placed on the other side of the joint.

4/ Apparatus according to claim 1 or claim 2, characterized in that the sensor includes an air bag (220d) and a sensor (23d) responsive to a pressure increase that appears in said air bag (210d).

5/ Apparatus according to claim 1 or claim 2, characterized in that the sensor (20d, 20g, 40d, 40g) includes a mechanically-controlled switch (123d) for placing on a first side of the joint, and a projecting piece (122d) for placing on the opposite side of the joint and designed to constitute an abutment for said mechanically-controlled switch (123d).

6/ Apparatus according to any preceding claim, characterized in that the sensor (20d, 20g, 40d, 40g) is designed to be placed on a shoulder of the user.

7/ Apparatus according to any preceding claim, characterized in that the sensors (20d, 20g, 40d, 40g) is designed to be placed on a hip of the user.

8/ Apparatus according to any preceding claim, characterized in that the sensor (20d, 20g, 40d, 40g) is designed to be placed on an ankle joint.

9/ Apparatus according to any preceding claim, characterized in that it comprises mechanical members (10, 30d, 30g) for applying mechanical actions on parts of the user's body under the control of a computer.

10/ Apparatus according to any preceding claim, characterized in that it includes a processor module (10) suitable for transforming the output signals from the sensor (20d, 20g, 40d, 40g) into signals usable by the computer.

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